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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,455	06/21/2001	James C. Kolanek	3326P009	6947
8791	7590	06/21/2005	EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			MEEK, JACOB M	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/887,455

Applicant(s)

KOLANEK, JAMES C.

Examiner

Jacob Meek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on 3/29/05. These drawings are accepted.

### ***Response to Arguments***

2. Applicant's arguments filed on 3/29/05 have been fully considered but they are not persuasive.

With regard to claim 1, and applicant's argument regarding the plant input and output signals, examiner acknowledges that it was initially unclear what applicant's intended meaning was of "plant output signal". However, with applicant's clarification of plant output signal we need to consider the Wright reference ('896) when taken as a whole with respect to applicant's invention.

Wright ('896) does teach the division of the output signal into a plurality of output subband signals (see figure 12, reference 121 each amplifier channel is sampled, where this is interpreted as equivalent to subband channels). Wright further discloses further digitizing a 1<sup>st</sup> output subband output signal over a 1<sup>st</sup> time interval, digitizing a 2<sup>nd</sup> subband output signal over a 2<sup>nd</sup> time interval (see column 48, lines 14 – 17 where this is interpreted as equivalent). Examiner further notes that Wright further discloses computing parameters of received set of data samples in a time-aligned manner (see column 49, lines 8 – 28 where (t) notation is interpreted as data sampled as a specified time instance). Following this thread, Wright also discloses performing an adaptive equalization process using the time aligned output subband and estimated output signals (see column 49, lines 28 – 33). Therefore the rejections of claim 1 - 5 are maintained in view of Wright ('896) when the reference is considered in its entirety.

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With regard to claim 6, and applicant's argument regarding the tunable receiver, examiner notes that Wright ('810), figure 34 shows the mux (reference 106) operating in conjunction with an RF downconverter (reference 66, which is interpreted as equivalent). Examiner notes that the reference as a whole must be considered.

With regard to argument second paragraph of page 8, Figure 34 was chosen as an illustrative case. Figures 32 or 35 also illustrate embodiments that are equally applicable, and show single outputs from plant. Examiner would further like to draw applicant's attention to figure 13 (note steps 1, 2, 7 & 8 where this is interpreted as equivalent to a plurality of subbands being measured). When reviewing the reference as a whole, rejection of claims 6 – 11 are maintained.

With regard to claim 12, examiner notes the argument regarding the means for modifying the transfer function (page 9, 1<sup>st</sup> full paragraph) and points to applicant's stated field of invention (column 1, lines 12 – 15) as a succinct description of a means for modifying transfer function. Examiner notes argument (page 9, 2<sup>nd</sup> full paragraph) regarding an antenna array system but points out that column 3, lines 20 – 30 specifically discusses the splitting of power and the feeding of multiple amplifiers which is germane to discussion. Examiner would further like to draw applicant's attention to figure 13 (note steps 1, 2, 7 & 8 where this is interpreted as equivalent to a plurality of subbands being measured). With regard to applicant's argument regarding the combination of references, given that the inventions use very similar components, and are from a common inventor the combination of elements would have been obvious in view of their similarities (inventor / application). When reviewing the reference as a whole, rejection of claims 12 – 15 are maintained.

***Other Cited Prior Art***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wright (US-6,054,894; US-6,313,703, and US-6,570,44), Stengel (US-5,901,346), and Buer (US-6,049,707) all disclose variations of distortion compensation of amplifier germane to applicant's area of invention.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

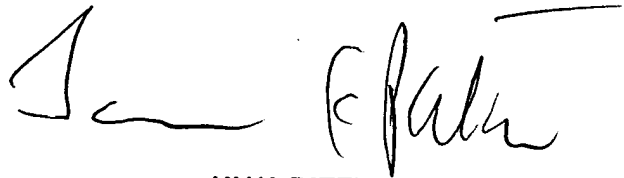
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Meek whose telephone number is (571)272-3013. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMM



JAY K. PATEL  
SUPERVISORY PATENT EXAMINER